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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,875	11/12/2003	Gregory M. Hawkins	P03101US1A	2315

7590

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EXAMINER

PARKER, FREDERICK JOHN

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/712,875	Applicant(s) HAWKINS ET AL.	
	Examiner Frederick J. Parker	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11-12-03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-9, drawn to method, classified in class 427, subclass 256.

II. Claims 10-16, drawn to apparatus, classified in class 118, subclass 504.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can perform another and materially different process such as applying anti-corrosion/anti-oxidation coatings, colorants, infiltrating polymers, or any other coating material into any toroidal-shaped object.

3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mike Sand on 3/31/06 a provisional election was made with traverse to prosecute the invention of group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Objections

7. Claims 1,2,4,8,9 are objected to because of the following informalities: (1) in claim 1, lines 3 & 6, claim 2, line 2: “ interior” should be “the inner” for consistency with the rest of the claim language. (2) claim 4 “spaying” is a typographic error. (3) claim 8, “lubricant” should be inserted before spray at the end of line 2 for clarity and consistency; line 3, nozzle” should be plural because there are two nozzles. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1,3,4,5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 1,3,4,5 are vague and indefinite because the relative term “high” does not clearly convey the intended air pressure, the term would be ambiguous and not apparent to the skilled artisan, and is undefined by the specification.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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12. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art, hereafter “APA” (“Background Information”, Specification pages 2-3) in view of Horvath US 3816165 or Hollstein US 4986210.

APA discloses it is known to deliver green tires to a spray coating station where a release coat is applied to the inner liner of the tire which contacts the expandable curing bladder. It is also disclosed that such lubricant would adversely effect the tire if it penetrated the innerliner splice, so a mechanical barrier (mask) is placed over the splice to prevent contamination of the sprayed lubricant. The disadvantage of the mechanical barrier/ mask is explicitly stated. Use of streams of pressurized air during spraying to prevent application of sprayed lubricant to the area to be protected, i.e. the innerliner splice, is not cited.

Horvath teaches that in coating the interior of hollow cans, containment of sprayed liquids is effectively accomplished using an air curtain 89 which “has the effect of chopping off the end” of the spray to confine it to a specific width and prevent the spray from “splashing, spraying, bouncing, or fogging out of the spray area” (col. 2, 44-56; Fig. 5 & col. 6, 4-13). Since Horvath teaches confining spraying in an internal portion of a hollow object (albeit a can and tire are different, they maintain generally similar geometries), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tire coating method of the APA by substituting its mechanical barrier means on the inner liner of the green tire with the concept of using a pressurized air curtain as disclosed by Horvath to eliminate the disadvantage of the mechanical barriers with a proven means to confine a coating spray and prevent contamination of areas not meant to be spray coated.

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Alternatively, Hollstein teaches to coat only threaded end portions of pipes by spraying coating material while simultaneously directing a high velocity masking air stream onto adjacent substrate portions which must remain uncoated. The high velocity masking air stream acts as an effective masking means to prevent contact and adherence of coating material where coating material should not be applied (col. 1, 51- col. 2, 3 and col. 5, 42-46). While the teaching is directed to an outer portion of a hollow object, the concept remains the same that directing a high velocity masking air stream onto adjacent substrate portions which must remain uncoated acts as an effective masking means. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tire coating method of the APA by substituting its mechanical barrier means on the inner liner of the green tire with the concept of using a high velocity masking air stream as disclosed by Hollstein to eliminate the disadvantage of the mechanical barriers with a proven means to mask portions of a substrate adjacent to those being spray coated to allow those portions to remain uncoated.

As to claim 4, the step of stopping the spraying of lubricant when pressures is sensed to reach non-ideal process conditions would have been an obvious process variation within the purview of one of ordinary skill because to operate under undesirable process conditions would have produced defective tire products.

13. Claims 5-9 distinguish over the prior art which do not teach radially moving the high pressure air nozzle within the tire opening during the spraying step; nor to generally axially insert into, and rotate a pair of lubricant nozzles in, the central opening of the tire to spray lubricant on the tire innerliner while directing air streams to create an air barrier to prevent

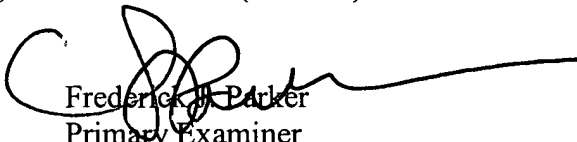
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coating of areas to be protected from spray. Claim 5 is rejected under 35 USC 112 above; claims 6-9 are objected to for depending from a rejected base claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Frederick J. Parker
Primary Examiner
Art Unit 1762

fjp